STEP 1.20

PRELIMINARY BACKROUND

The Preliminary Background step is vital in providing NIAC participants with sufficient information to achieve a common understanding of each request and its associated requirements and implications. The three parts of this step are outlined below.

Part 1.21: Develop an understanding of the segment background. In this part, information is provided to give NIAC participants background information on how the industry segment from which the request originated generally operates. This information can contribute to establishing a common perspective from which to view the request.

Part 1.22: Develop a general description of need. The description of the desired capability should begin as non-technical and should describe the request in terms of the functional need(s) to be satisfied.

Part 1.23: Consideration of Cross-Segment Interests and Impacts. There may be other NIAC participants who have an interest in the request. If possible, these other NIAC participants should be identified at this stage.

STEP 1.30

REVIEW AND VALIDATION

In the Review and Validation step, the NIAC considers the originality of the request and its relationship to other requests in progress. The step consists of three parts, each described below.

Part 1.31: Relationship to Other Requests. The request that is submitted may not be totally new or may present overlaps or conflicts with active requests, existing services or those soon to be implemented. Requests that were deferred at an earlier time will need to indicate the changed circumstances that warrant further work at this time. If the request is not sufficiently different form others, the NIAC may choose to sufficiently different with other requests and/or services should be carefully addressed.

Part 1.32: Assessment of the suitability of the Request to the NIAC Process. The NIAC systematic uniformity process addresses requests that are directed at more than one Incombent Local Exchange Carrier or have long term uniformity considerations. Accordingly, if a request is directed at only one ILEC or does not have uniformity implications, and ESP may find that ILEC-specific "120 day" service request processes are a more appropriate vehicle for pursuing his or her need.

Part 1.33: Acceptance of the Request. Based on Parts 1.31 - 1.32, the NIAC will formally accept or defer the request. Accepted requests will receive a issue request tracking number (e.g.: NIIF-Issue #xxxx). Deferred requests may be resubmitted by the originator at such time as changed circumstances warrant further effort by the NIAC.

STEP 1.40

FORMAL REQUEST DOCUMENTATION

Comprehensive documentation of all information on the request generated throughout Step 1.00 occurs in Step 1.40. This information is intended to provide the basis for the remaining steps of the systematic uniformity process. This step consists of three parts.

Part 1.41: Recording of Detailed Request. The information on the Documentation Form should include a description of the detailed request, its source and originator, and a summary of the background associated with the request. Any information pertinent to the industry segment initiating the request should also be included.

Part 1.42: Basic Operating Description. This information is expected to provide direct input into Step 2.00, "Description of Functionality" and should include a description of the need, operating attributes, and any general requirements considered essential to describing the service.

Part 1.43: Allocation of Resources. Formal request documentation is complete when it includes a list of the individuals who will, at least initially, constitute the task group devoted to the progress of the request through the systematic uniformity process. At a minimum, the task group should include a service request champion from both the ILEC and non-ILEC communities.

STEP 1.00 OUTPUT FORM

Originator:_____ Tracking No. ESPR-xxx
Company:_____ Date Accepted_____
Phone:_____ (From Step 1.33)

DESCRIPTION OF REQUESTED SERVICE & BACKGROUND

(1.40)

BASIC OPERATING DESCRIPTION

(1.40)

TASK GROUP:

Name	Company	Phone	FAX
*			
**			

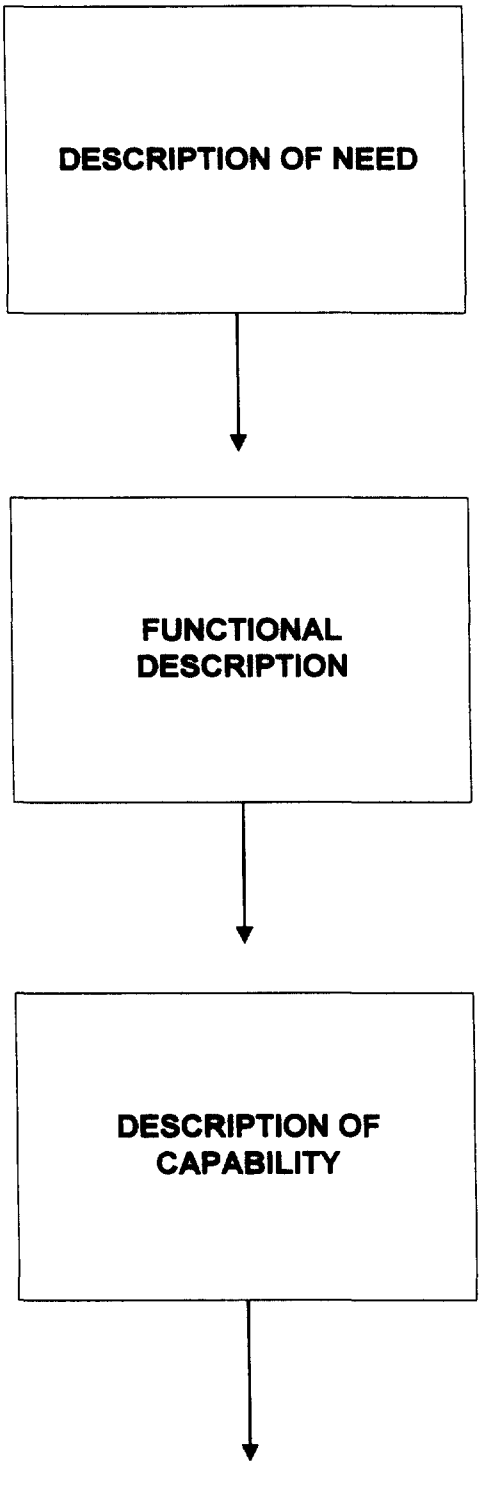
(1.40)

* Non-LEC Co-Champion
** LEC Co-Champion

STEP TWO

Description of Functionality

STEP TWO: DESCRIPTION OF FUNCTIONALITY



STEP THREE:
Technical Description

STEP 2.00

DESCRIPTION OF FUNCTIONALITY

OVERVIEW

Once a service request has been formally accepted, the general information gathered in Step 1.00 needs to be expanded into a clear, detailed description of the functional need. The objectives of this step are to: achieve a common understanding of the need; establish a generic name for the functionality; and create sufficiently detailed and unambiguous service description and operational requirements to allow for technical development.

This phase of the process consists of three steps:

Step 2.10: DESCRIPTION OF NEED. Define fully the problem or function the request is intended to address.

Step 2.20: DESCRIPTION OF CAPABILITY. Define fully what the request needs to do to meet the need.

Step 2.30: FUNCTIONAL DESCRIPTION. Define fully how the request is intended to operate.

Activities associated with Step 2.00 of the systematic uniformity process fall under the responsibility of the Issue Co-Champions.

STEP 2.10

DESCRIPTION OF NEED

To enable subsequent steps of the process to unfold, additional information about the request will usually be necessary, and is collected in Step 2.10. Each part of the step is described below.

Part 2.11: Elaborate Upon the Preliminary Background for the Request, using the material in Step 1.4. What problem would be addressed if the request were fulfilled?

Part 2.12: Scope of Need. What are the general parameters of the request? For example, is the request useful only if it operates on an interswitch basis or is single switch capacity adequate? Is the request unique to a particular community of interest?

Part 2.13: ESP Interest Level. Identification of ESP interest level and/or utility of the request will facilitate each individual ILEC's analysis of the request. Appropriate activity in the NIAC to explore the utility of the requested capability could include:

- promotional workshops presenting information on a particular requested service in order to cultivate a better understanding of its utility and stimulate interest in that service;
- formal or informal surveys of interest and/or utility to ESPs; and
- identifying the range of information services that would benefit from the availability of the requested capability.

Part 2.14 Pertinent Operational Environment. Are there existing technologies or capabilities with which the request must interact?

Part 2.15: Final Delineation of Unique Requests. It is possible that the elaboration of needs and requirements during this step will result in significantly different forms of the functionality being requested. For example, consideration of a call forwarding select feature might generate requests form one community of participants for a feature in which only calls originating from a list of predesignated numbers are forwarded and requests from other participants for a feature in which all calls except those originating from a list of predesignated numbers are forwarded. To avoid confusion during the technical development process, any request which appears to include functionally distinct variants should be documented as separate service requests.

Part 2.16: Document the Description of Need. A summary of the information gathered in Parts 2.11 - 2.14 should be record on the Step 2.00 output documentation form.

Step 2.20

DESCRIPTION OF CAPABILITY

In this step, more complete information is gathered about the requested capability. The four parts of this step are outlined below.

Part 2.21: Describe the Requested Capability. Provide a description of what the requested capability is expected to accomplish.

Part 2.22: Establish a Generic Name for the Requested Capability. Preliminary determination of the classification of the service (e.g., as a BSE or CNS) is also made at this point.

Part 2.23: Comparison of Described Capability with Identified Need. Does the capability match the need described in Step 2.10? Have all essential aspects of the requested capability been identified and addressed? Adjustments may be required in the description of capability, the description of need, or both in order to secure a match.

Part 2.24: Documentation of Described Capability. Space for a concise summary of the description of capability is provided on the Step 2.00 output documentation form.

Step 2.30

FUNCTIONAL DESCRIPTION

In this step, the results of steps 2.10 and 2.20 can be used to produce greater detail on the requested functionality. The two parts of the step are presented below.

Part 2.31: Develop Description of the Function Operation of the Request. The functional characteristics of the request would include the manner of information transfer, the point in the network that provides the requested functionality, the associated functionality's that should tie into the request, etc.

Part 3.32: Documentation of Functional Description. In the appropriate portion of the Step 2.00 Output Form, a concise summary of the Functional Description should be recorded.

STEP 2.00 OUTPUT FORM

ESPR-xxx	GENERIC NAME:

DESCRIPTION OF NEED

(2.10)

DESCRIPTION OF CAPABILITY

(2.20)

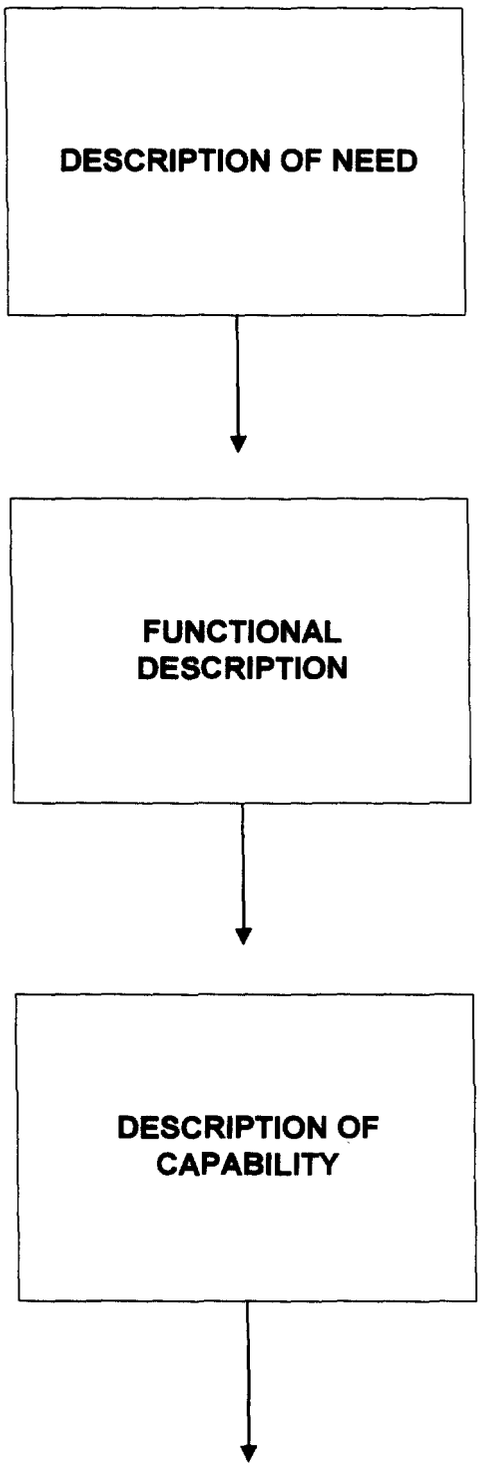
FUNCTIONAL DESCRIPTION

(2.30)

STEP THREE

Technical Description

STEP TWO: DESCRIPTION OF FUNCTIONALITY



STEP THREE:
Technical Description

STEP 3.00

TECHNICAL DESCRIPTION

OVERVIEW

The third step of the Systematic Approach to Uniformity process details the technical description of the request. This part of the process consists of four steps.

Step 3.10: FUNCTIONAL REVIEW. The functional parameters of the request that were developed in step 2.00 will be reviewed so that additional technical description of the request can be developed.

Step 3.20: PERFORMANCE REQUIREMENTS. In this step, the specific technical performance requirements are identified and documented.

Step 3.30: INTERFACE REQUIREMENTS. The manner in which the requested capability must interact with existing and planned interfaces is defined.

Step 3.40: DOCUMENTATION OF TECHNICAL SERVICE DESCRIPTION. On the step 3.00 Output Form, the information gathered in the foregoing steps will be summarized.

Activities associated with Step 3.00 of the systematic uniformity process fall under the responsibility of the Issue Co-Champions.

STEP 3.10

FUNCTIONAL REVIEW

The functional parameters of the request that were developed in Step 2.00 will be reviewed so that additional technical description of the request can be developed. This is to ensure that the necessary information is available and in a format that will facilitate further work.

Part 3.11: Review of Functional Description. Using technical expertise as appropriate, the output documentation from Step 2.00 will be reviewed to ensure that sufficient detail exists to facilitate adequate technical specification.

Part 3.12: Clarification of Functional Description by Request Champion. Should additional information be required concerning the need or expected capabilities of the request, clarification from the request champion should be sought.

Part 3.13: Solicit Technical Input. Additional expert technical input into the technical description may be needed at this stage, including input from technical subject matter experts (SMEs).

STEP 3.20

PERFORMANCE REQUIREMENTS

Any performance requirements associated with a request must be clearly defined before the technical description can be completed. This work occurs in Step 3.20, Performance Requirements. There are two parts to this step, as listed below.

Part 3.21: Consideration of Technical Details. In this part, all associated operational requirements will be examined to identify the necessary technical parameters of the requested capability. These include, but are not limited necessarily to:

- Bandwidth for transmission
- Real time requirements
- Associated features or functions with which the request should be compatible
- Feature interactions to be avoided
- Requirements for customer-based equipment/architectures with which the request will interact, and how the interaction is to occur
- Necessary or desired interfaces with operational support systems

Part 3.22: Establish Classification of Service. Final classification of service as a BSE, CNS, BSA or ancillary service occurs at this stage.

Part 3.23: Documentation of Technical Performance Requirements. A summary of the performance requirements is prepared and included in the Step 3.00 output document.

STEP 3.30

INTERFACE REQUIREMENTS

The manner in which the requested capability must interact with the existing and/or planned interfaces is defined in Step 3.30, Interface Requirements. The step will also be useful in developing the information needed to fulfill network disclosure obligations, if applicable.

Part 3.31: Determine the Physical Interface Requirements. The physical interface provides the mechanical and electrical characteristics to connect, maintain, and disconnect customer premises equipment and the network point of interface. That means, for example, that it should be determined whether the request can be met by current connector arrangements such as RJ11 or RJ48, whether line powering by the network is needed, or whether a new line coding format is needed to ensure proper pulse shapes are received at the point of interface.

Part 3.32: Determine the Logical Interface Requirements. With input from end users, standards bodies, equipment manufacturers and others, determine the logical interface requirements with existing and planned network components.

Part 3.33: Identify Areas where Standards Work May be Necessary. If the request appears to be feasible dependent upon additional standards specifications being developed, these requirements should be identified and noted.

STEP 3.40

TECHNICAL SERVICE DESCRIPTION

The information that was identified in Step 3.10 through 3.30 is consolidated into a Technical Service Description in Step 3.40. Using the Output Form for Step 3.00, the description will include, but not be limited to the following factors: tracking number and genetic name for the functionality (carried over from steps 1.30 and 2.20, respectively); performance requirements (3.20); classification of service (2.20, 3.20); and necessary interface requirements (3.30). Citations to technical references/standards in general distribution should also be identified and catalogued.

STEP 3.00 OUTPUT FORM

ESPR-xxx	GENERIC NAME:

PERFORMANCE REQUIREMENTS

(3.20)

CLASSIFICATION OF SERVICE (e.g; BSE, CNS, BSA): (3.20)

INTERFACE REQUIREMENTS

(3.30)

EXISTING & ANTICIPATED STANDARDS/TECHNICAL REFERENCES

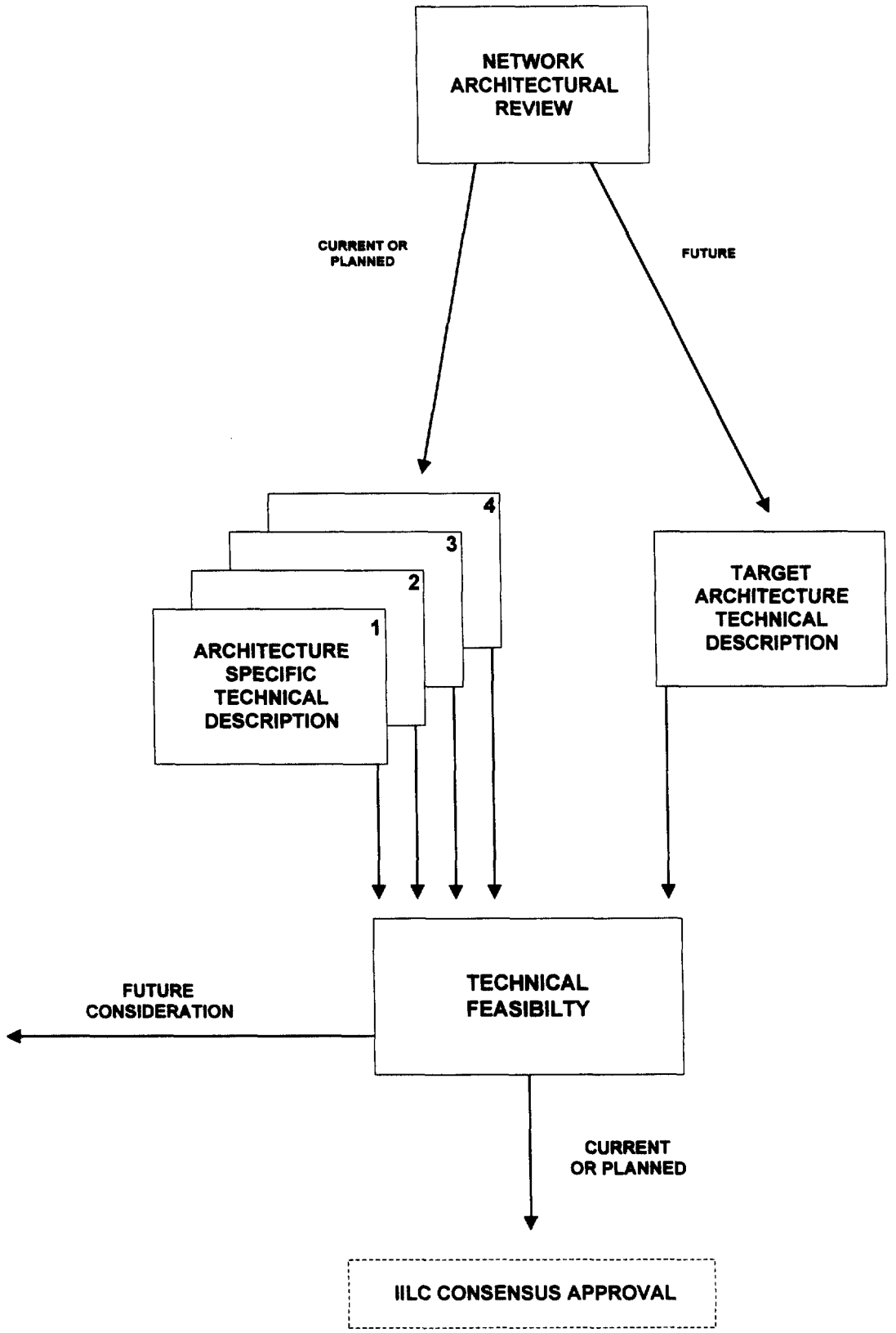
(3.30)

OTHER TECHNICAL CONSIDERATIONS

STEP FOUR

Technical Feasibility

STEP FOUR: TECHNICAL FEASIBILITY



STEP 4.00

TECHNICAL FEASIBILITY

OVERVIEW

This step determines the technical feasibility of meeting the request documented in Step 3.00.

Step 4.10: NETWORK ARCHITECTURAL REVIEW. The first step is to evaluate whether the request can be addressed with current/planned or future network technologies.

Step 4.20: ARCHITECTURE SPECIFIC TECHNICAL DESCRIPTION(S). Descriptions of all current/planned technology solutions (if any) are captured in this phase.

Step 4.30: TARGET ARCHITECTURE TECHNICAL DESCRIPTION. If no uniform solution is available utilizing current/planned network capabilities, this step determines what future network capability or capabilities will best meet the request and achieve ONA's uniformity objectives.

Step 4.40: TECHNICAL FEASIBILITY. Completion of this step results in a detailed report describing a set of current, planned and/or future solutions to the requested need.

The activities associated with Step 4.00 of the systematic uniformity process fall under the responsibility of the Issue Co-Champions. At the conclusion of Step 4.00, NIAC consensus approval is sought for the fully documented service request.

STEP 4.10

NETWORK ARCHITECTURAL REVIEW

The first step in assessing the technical feasibility of a requested functionality is to evaluate whether current, planned or future network capabilities are needed to implement the Technical Description reached in Step 3.00.

Part 4.11: Current or Planned Network Capabilities. A network capability is considered to be a current capability if it is generally available from switch vendors and/or a capability of the embedded network. A network capability is considered to be a planned capability if it is included in a vendor announced generic release. All current or planned network solutions to the functional request are fed into Step 4.20: Architecture Specific Technical Descriptions.

Part 4.12: Future Network Capabilities. The utility of more long term, future technologies in supporting the functionality should be considered. These are passed forward to Step 4.30: Target Architecture Technical Description.

All possible methods of providing the functionality should be identified, prior to the specific technical review processes of Steps 4.20 and 4.30. For example, in the case of the ESP request for Calling Number Identification Delivery, the following features were identified as providing the requested feature functionality; Feature Group D, ANI delivery via ISDN primary rate interface (Q.931), Common Channel Signaling, ICLID, BCLID and SMDI all of varying utility and via individual interfaces.

STEP 4.20

ARCHITECTURE SPECIFIC TECHNICAL DESCRIPTIONS

If current or planned network capabilities meet the request, the next step in the process is preparation of the set of architecture-specific technical descriptions. In order to distinguish between the alternatives, each technical description/response should contain the following information:

Part 4.21: Service Operation. How does the service operate, both functionally and technically?

Part 4.22: Technological and Feature Interaction Considerations. What types of equipment can provide the functionality and how does it interact with other features (e.g. call waiting interactions with call forwarding)?

Part 4.23: Network Architecture. How and where in the ILEC network architecture is the functionality provided?

Part 4.24: Physical and Logical Interface. Citations should be made to the relevant sections of technical reference/standards which specify the physical and logical interfaces for each alternative.

STEP 4.30

TARGET ARCHITECTURE TECHNICAL DESCRIPTION

Where more than one technical solution is available, or if no solution is available utilizing current or planned network capabilities, the next step in the process is to determine what future network capabilities will best meet the request and achieve ONA's uniformity objectives. These are incorporated into a technical description of the "Target Architecture."

In order to clarify how the need can be met with future network capabilities, the output of the target architecture step should be a service concept definition which contains:

Part 4.31: Service Concept Operation. This describes how the service is envisioned to operate, both functionally and technically.

Part 4.32: Network Architecture. This defines how and where within the future ILEC network configurations the functionality would be provided.

Part 4.33: Technological Issues. Any architectural features/components issues which need to be resolved before the service concept can be implemented (e.g. future technology, standards, or performance issues) are identified in this step.

By identifying a target architecture, this step promotes the development of a long term, uniform technical solution.